

# FIC Series

## Flash in Card



CF Card

### Introduction

Axiomtek's FIC (Flash in Card) series complies with CompactFlash™ specification and provides complete PCMCIA-ATA functionality and compatibility. The CF card is available in memory capacities ranging from 128MB up to 32GB in standard & industrial temperature to meet the demand of critical application. The operating temperature supports standard temperature grade (0°C ~+70°C) and industrial temperature grade (-40°C ~+85°C). The FIC series is an ideal solution for industrial storage application requiring reliability, high performance, and low power consumption.

### Specifications

General Specification	
Capacity	128MB~32GB
Interface	50pin CompactFlash™ Type I
IDE Transfer Mode	PIO Mode 0-6/MwDMA Mode 0-4/UDMA 0-4
Drive Config. Switch	Yes (Master/Slave)
Sustained Speed Rate (max)	128MB~512MB Read:20MB/sec.; Write:10MB/sec. 1GB~8GB Read:40MB/sec. ; Write:20MB/sec 16GB Read:110MB/sec. ; Write:70MB/sec 32GB Read:110MB/sec. ; Write:100MB/sec
Environmental Specification	
Operating Temperature	0°C~70°C (0°F~158°F) (standard temp.) -40°C~85°C (-40°F~185°F) (industrial temp.)
Storage Temperature	-55°C~95°C (-67°F~203°F)
Humidity	10%~95% non-condensing
Vibration	20G(7~2000Hz)
Shock	1500G/0.5ms
System Reliability	
ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
R/W Endurance	2,000,000 times
Wear-leveling	Support

### Features

- CompactFlash™ specification standard
- Capacity: 128MB up to 32GB
- Highly heat resistance design: Industrial plastic material housing
- Suitable for high demanding applications
- Well performed under harsh operating environment and industrial temperatures
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- True IDE Mode (fixed Mode)
- High operating reliability & durability
- Low power consumption

Power Requirement	
DC Input Voltage	+3.3V/+5V single power supply operation
Power Mode	Auto stand-by and sleep mode
Power Consumption	128MB~512MB: 69mA(max.) 1GB~8GB: 125mA(max.) 16GB,32GB:210mA(max.)
Physical Specification	
Enclosure Material	PC card plastic frame with metal cover
Dimensions	42.8 x 36.4 x 3.3 mm (W x H x L)

### Ordering Information

Models (standard temp.)	Models (industrial temp.)	Capacity
FIC128MSC1T	FIC128MSW1T	128MB
FIC256MSC1T	FIC256MSW1T	256MB
FIC512MSC1T	FIC512MSW1T	512MB
FIC001GSC1T	FIC001GSW1T	1GB
FIC002GSC1T	FIC002GSW1T	2GB
FIC004GSC1T	FIC004GSW1T	4GB
FIC008GSC1T	FIC008GSW1T	8GB
FIC016GSC1T	FIC016GSW1T	16GB
FIC032GSC1T	FIC032GSW1T	32GB

Архангельск (8182)63-90-72  
Астана +7(7172)727-132  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Казань (843)206-01-48

Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41

Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78

Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

# FID Series

Flash in Disk-IDE



## Features

- IDE/ATA standard interface
- Capacity: 8GB to 256GB
- 2.5" standard form factor
- Suitable for high demanding applications
- Well performed under harsh operating environment
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- Perfect replacement of hard drive
- High operating reliability & durability
- Low power consumption

## Introduction

Axiomtek's FID (Flash in Disk-ATA) series is a high performance 2.5" flash disk and fully compatible with IDE standard which make it an ideal replacement for conventional IDE HDD without any driver or system modification. This 2.5" IDE flash disk is provided with huge capacities up to 256GB to meet diverse needs of data storage. With the features of high capacity storage, data integrity, anti-vibration and low power consumption, the FID series is surely a solid solution for expanding an industrial computer's memory.

## System

General Specification	
Capacity	8 GB ~ 256 GB
Interface	44-pin (2.0mm) IDE/ATA
Flash type	SLC
Form Factor	2.5"
Data Transfer Rate	Read: 90MB/sec (max.) Write: 65 ~ 90MB/sec (max.)
Environmental Specification	
Operating Temperature	0°C ~ +70°C (32°F ~ 158°F) (standard temp.) -40°C ~ +85°C (-40 °F ~ 185°F) (industrial temp.)
Storage Temperature	-55°C ~ +95°C (-67°F ~ 203°F)
Humidity	10% ~ 95% non-condensing
Vibration	20 G (7~2000Hz)
Shock	1500 G/ 0.5ms
System Reliability	
ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
R/W Endurance	2,000,000 times
Wear-leveling	Support
Power Requirement	
Sleep Mode	75mA ± 5%
Physical Specification	
Enclosure Material	Aluminum Mechanical Cover
Dimensions	69.8 x 100.1 x 9.5mm (W x H x L)

## Ordering Information

Models (standard temp.)	Models (industrial temp.)	Interface	Capacity
FID008GSC1T	FID008GSW1T	44 PIN	8GB
FID016GSC1T	FID016GSW1T	44 PIN	16GB
FID032GSC1T	FID032GSW1T	44 PIN	32GB
FID064GSC1T	FID064GSW1T	44 PIN	64GB
FID128GSC1T	FID128GSW1T	44 PIN	128GB
FID256GSC1T	FID256GSW1T	44 PIN	256GB

# FIM Series

## Flash in Module



IDE 40pin Flash Module



IDE 44pin Flash Module

### Introduction

AXIOMTEK's FIM (Flash in Module) series is designed into ATA protocol type with compatible IDE standard interface based on flash memory technology. This flash module is offered with various capacities ranging from 128MB up to 4GB and can operate under industrial temperature range goes from -40°C~85°C in the harsh operating environments. The features of reliability, high performance, cost-effective and easy-to-integrate designs make FIM series a perfect solution over traditional storage devices.

### Specifications

General Specification	
Capacity	128MB~16GB
Interface	40pin/44pin IDE/ATA
IDE Transfer Mode	PIO Mode 0~4/MwDMA Mode 0~2/UDMA 0~2 Mode
Sustained Speed Rate	128MB~512M : Read: 20MB/sec ; Write: 10MB/sec 1GB~4GB : Read: 40MB/sec ; Write: 20MB/sec
Environmental Specification	
Operating Temperature	0 °C~70 °C (14°F ~158°F) (standard temp.) -40 °C~85 °C (-40 °F ~185°F) (industrial temp.)
Storage Temperature	-55 °C~125 °C (-67°F ~ 257°F)
Humidity	10%~95% non-condensing
Vibration	5G(7~2000Hz)
Shock	50G/10ms
System Reliability	
ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
R/W Endurance	2,000,000 times
Wear-leveling	Support
Power Requirement	
DC Input Voltage	+3.3V/+5V single power supply operation
Power Mode	Auto stand-by and sleep mode

Power Consumption	150mA(max.)
Physical Specification	
Enclosure Material	PC Mechanical Cover and UL-94
Dimensions	40-pin: 60.2 x 27.8 x 6.4mm (W x H x L) 44-pin: 50.3 x 27.3 x 5.8mm (W x H x L)

### Features

- IDE/ATA standard interface
- Capacity: 128MB to 4GB
- Master/slave switch selectable
- Suitable for high demanding applications
- Well performed under harsh operating environment and industrial temperatures
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- Perfect replacement of hard drive, compatible with IDE/ATA 40-pin and 44-pin
- High operating reliability & durability
- Low power consumption
- Fully compatible with devices and OS



### Ordering Information

Models (standard temp.)	Models (industrial temp.)	IDE interface	Capacity
FIM128M40VSC1T	FIM128M40VSW1T	40 PIN	128MB
FIM256M40VSC1T	FIM256M40VSW1T	40 PIN	256MB
FIM512M40VSC1T	FIM512M40VSW1T	40 PIN	512MB
FIM001G40VSC1T	FIM001G40VSW1T	40 PIN	1GB
FIM002G40VSC1T	FIM002G40VSW1T	40 PIN	2GB
FIM004G40VSC1T	FIM004G40VSW1T	40 PIN	4GB
FIM128M44VSC1T	FIM128M44VSW1T	44 PIN	128MB
FIM256M44VSC1T	FIM256M44VSW1T	44 PIN	256MB
FIM512M44VSC1T	FIM512M44VSW1T	44 PIN	512MB
FIM001G44VSC1T	FIM001G44VSW1T	44 PIN	1GB
FIM002G44VSC1T	FIM002G44VSW1T	44 PIN	2GB
FIM004G44VSC1T	FIM004G44VSW1T	44 PIN	4GB

# FSA Series

Flash SATA Disk /SATAIII SLC, MLC



▲ 2.5" SATA Flash Disk /SLC (MLC)

## Introduction

Axiomtek's FSA (Flash SATA Disk) series is a high performance 2.5" flash disk and fully compatible with SATAIII standard which make it an ideal replacement for conventional SATA HDD without any driver or system modification. This 2.5" SATAIII flash disk is provided with huge capacities up to 256GB to meet diverse needs of data storage. With the features of high capacity storage, data integrity, anti-vibration and low power consumption, the FSA series is surely a solid solution for expanding an industrial computer's memory.

## System

### General Specification

Capacity	SLC : 4 GB ~ 256 GB MLC : 8 GB ~ 512 GB
Interface	SATA III 6.0 Gbp/s
Connector	7+15 pin male
Flash type	SLC /MLC
Form Factor	2.5"
Data Transfer Rate	SLC: Read: 68~490 MB/Sec (max.) Write: 52~430 MB/Sec (max.) MLC: Read: 120~290 MB/Sec (max.) Write: 20~260 MB/Sec (max.)

### Environmental Specification

Operating Temperature	0°C~70°C (32°F ~158°F) (standard temp.) -40°C~85°C (-40 °F ~185°F) (industrial temp.)
Storage Temperature	-55°C~95°C (-67°F ~203°F)
Humidity	10%~95% non-condensing
Vibration	20G(7~2000Hz)
Shock	1500G/0.5ms

### System Reliability

ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
R/W Endurance	2,000,000 times
Wear-leveling	Support

### Power Requirement

DC Input Voltage	+5 DC ± 5%
Power Consumption	SLC (Target: 256 GB): Read: 482mA (max.) Write: 546mA (max.) Idle: 145mA (max.) MLC (Target: 512 GB): Read: 610mA (max.) Write: 870mA (max.) Idle: 110mA (max.)

### Physical Specification

Enclosure Material	Aluminum Mechanical Cover
Dimensions	69.8 x 100 x 7.0mm (W x L x H) MLC 69.8 x 100 x 9.2mm (W x L x H) SLC
	*Tolerance ± 0.25mm

## Features

- SATA III standard interface, Excellent data transfer speed  
Capacity: SLC : 4 GB ~ 256 GB  
MLC : 8 GB ~ 512 GB
- 2.5" standard form factor
- Suitable for high demanding applications
- Well performed under harsh operating environment
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- Intelligent error recovery system
- Perfect replacement of hard drive
- High operating reliability & durability
- Enhanced power cycling management & Low power consumption
- iSMART disk health monitoring

## Ordering Information

### SLC

Models (Standard temp. SLC)	Models (Industrial temp. SLC)	Interface	Capacity
FSA004GSC1T	FSA004GSW1T	SATAIII 6.0G	4GB
FSA008GSC1T	FSA008GSW1T	SATAIII 6.0G	8GB
FSA016GSC1T	FSA016GSW1T	SATAIII 6.0G	16GB
FSA032GSC1T	FSA032GSW1T	SATAIII 6.0G	32GB
FSA064GSC1T	FSA064GSW1T	SATAIII 6.0G	64GB
FSA128GSC1T	FSA128GSW1T	SATAIII 6.0G	128GB
FSA256GSC1T	FSA256GSW1T	SATAIII 6.0G	256GB

### MLC

Models (Standard temp. MLC)	Models (Industrial temp. MLC)	Interface	Capacity
FSA008GMC1T	FSA008GMW1T	SATAIII 6.0G	8GB
FSA016GMC1T	FSA016GMW1T	SATAIII 6.0G	16GB
FSA032GMC1T	FSA032GMW1T	SATAIII 6.0G	32GB
FSA064GMC1T	FSA064GMW1T	SATAIII 6.0G	64GB
FSA128GMC1T	FSA128GMW1T	SATAIII 6.0G	128GB
FSA256GMC1T	FSA256GMW1T	SATAIII 6.0G	256GB
FSA512GMC1T	FSA512GMW1T	SATAIII 6.0G	512GB

# FSA 2.5" Series

Flash SATA Disk /SATA2 SLC



## Features

- SATA II standard interface
- Capacity: 2 GB to 256 GB
- 2.5" standard form factor
- Suitable for high demanding applications
- Well performed under harsh operating environment
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- Perfect replacement of hard drive
- High operating reliability & durability
- Low power consumption

## Introduction

Axiomtek's FSA (Flash SATA Disk) series is a high performance 2.5" flash disk and fully compatible with SATAII standard which make it an ideal replacement for conventional SATA HDD without any driver or system modification. This 2.5" SATAII flash disk is provided with huge capacities up to 256 GB to meet diverse needs of data storage. With the features of high capacity storage, data integrity, anti-vibration and low power consumption, the FSA series is surely a solid solution for expanding an industrial computer's memory.

## System

General Specification	
Capacity	2 GB ~ 256 GB
Interface	SATA II 3.0Gbp/s
Connector	7+15 pin male
Flash type	SLC
Form Factor	2.5"
Data Transfer Rate	2GB~128GB : Read: 50~250MB/sec (max.) Write: 27~230MB/sec (max.) 256 GB: Read: 250MB/sec (max.) Write: 230MB/sec (max.)
Environmental Specification	
Operating Temperature	0°C ~ +70°C (32°F ~ 158°F) (standard temp.) -40°C ~ +85°C (-40 °F ~ 185°F) (industrial temp.)
Storage Temperature	-55°C ~ +95°C (-67°F ~ 203°F)
Humidity	10% ~ 95% non-condensing
Vibration	20 G (7~2000Hz)
Shock	1500 G/ 0.5ms
System Reliability	
ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
Flash Endurance	100,000 P/E Cycles
Wear-leveling	Support
Power Requirement	
DC Input Voltage	+5 DC ± 5%
Power Consumption	2GB~128GB: Read : 450mA(max.) Write : 560mA(max.) Idle : 200(max.) 256 GB: Read : 580mA(max.) Write : 700mA(max.) Idle : 250(max.)
Physical Specification	
Enclosure Material	Aluminum Mechanical Cover
Dimensions	69.8 x 100.1 x 9.3mm (W x H x L)

## Ordering Information

Models (standard temp. SLC)	Models (industrial temp. SLC)	Interface	Capacity
FSA02G-PTC	FSA02G-PTW	SATAII 3.0G	2GB
FSA04G-PTC	FSA04G-PTW	SATAII 3.0G	4GB
FSA08G-PTC	FSA08G-PTW	SATAII 3.0G	8GB
FSA16G-PTC	FSA16G-PTW	SATAII 3.0G	16GB
FSA32G-PTC	FSA32G-PTW	SATAII 3.0G	32GB
FSA64G-PTC	FSA64G-PTW	SATAII 3.0G	64GB
FSA128G-PTC	FSA128G-PTW	SATAII 3.0G	128GB
FSA256G-PTC	FSA256G-PTW	SATAII 3.0G	256GB

\* All specifications and photos are subject to change without notice.

# FSA 300 Series

Flash SATA Disk /mSATA SATA 3 SLC,MLC



▲ mSATA /SLC(MLC)

## Introduction

Axiomtek's FSA mSATA series is designed as the standard Mini PCIe form factor with SATA interface, and support SATA III standard (6.0Gb/s) with excellent performance. The form factor refers to the MO-300 specification which established by JEDEC. Regarding of mechanical interference, the mSATA absolutely replaces the traditional hard disk and makes personal computer, in any field, smaller and easier.

The mSATA effectively reduced the booting time of operation system and the power consumption is less than hard disk drive (HDD), and complies with ATA protocol, no additional drives are required, and can be configured as a boot device or data storage device.

## System

General Specification	
Capacity	SLC: 1 GB ~ 64 GB MLC: 4 GB ~ 128 GB
Interface	SATA III 6.0Gbp/s
Connector	mSATA, 52P/Mini PCIe
Flash type	SLC/MLC
Form Factor	MO300A/MO300B
Data Transfer Rate	SLC: Read: 460 MB/sec (max.) Write: 230 MB/sec (max.) MLC: Read: 460 MB/sec (max.) Write: 160 MB/sec (max.)
Environmental Specification	
Operating Temperature	Standard Grade: 0°C ~ +70°C (32°F ~ 158°F) Industrial Grade: -40°C ~ +85°C (-40°F ~ 185°F)
Storage Temperature	-55°C ~ +95°C (-67°F ~ 203°F)
Humidity	10% ~ 95% non-condensing
Vibration	20 G (7~2000Hz)
Shock	1500G/0.5ms
System Reliability	
ECC Technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
Flash Endurance	SLC: 100,000 P/E Cycles MLC: 3,000 P/E Cycles
Wear-leveling	Support
Power Requirement	
DC Input Voltage	+3.3V/+5V single power supply operation
Idle Mode	SLC: 120mA (max.) MLC: 95mA (max.)
Physical Specification	
Dimensions	29.8 x 50.8 x 4.4 mm (W x L x H)

## Features

- SATA III (6.0Gb/s) interface
- Capacity: SLC 1 GB to 64 GB  
MLC 4 GB to 128 GB
- iSMART disk health monitoring
- Intelligent error recovery system
- Write protection security
- Anti-vibration mechanical design
- Excellent data transfer speed
- Zero mechanical interference
- JEDEC standard MO-300B dimension

## Ordering Information

SLC			
Models (standard temp. SLC)	Models (industrial temp. SLC)	Interface	Capacity
FSA001G300SC1T	FSA001G300SW1T	SATAIII 6.0G	1 GB
FSA002G300SC1T	FSA002G300SW1T	SATAIII 6.0G	2 GB
FSA004G300SC1T	FSA004G300SW1T	SATAIII 6.0G	4 GB
FSA008G300SC1T	FSA008G300SW1T	SATAIII 6.0G	8 GB
FSA016G300SC1T	FSA016G300SW1T	SATAIII 6.0G	16 GB
FSA032G300SC1T	FSA032G300SW1T	SATAIII 6.0G	32 GB
FSA064G300SC1T	FSA064G300SW1T	SATAIII 6.0G	64 GB

MLC			
Models (Standard temp. MLC)	Models (industrial temp. MLC)	Interface	Capacity
FSA004G300MC1T	FSA004G300MW1T	SATAIII 6.0G	4 GB
FSA008G300MC1T	FSA008G300MW1T	SATAIII 6.0G	8 GB
FSA016G300MC1T	FSA016G300MW1T	SATAIII 6.0G	16 GB
FSA032G300MC1T	FSA032G300MW1T	SATAIII 6.0G	32 GB
FSA064G300MC1T	FSA064G300MW1T	SATAIII 6.0G	64 GB
FSA128G300MC1T	FSA128G300MW1T	SATAIII 6.0G	128 GB

# FSA 301 Series

Flash SATA Disk/mSATA Mini SATA 3  
SLC, MLC



▲ mSATA Mini /SLC (MLC)

## Introduction

Axiomtek's FSA mSATA mini series is designed as the standard Mini PCIe form factor with SATA interface, and support SATA III standard (6.0Gb/s) with excellent performance. The form factor refers to the MO-300B specification which established by JEDEC. Regarding of mechanical interference, the mSATA mini FSA absolutely replaces the traditional hard disk and makes personal computer, in any field, smaller and easier.

The mSATA mini effectively reduced the booting time of operation system and the power consumption is less than hard disk drive (HDD), and complies with ATA protocol, no additional drives are required, and can be configured as a boot device or data storage device.

## System

General Specification	
Capacity	SLC: 1 GB ~ 32 GB MLC: 4 GB ~ 64 GB
Interface	SATA III 6.0Gb/s
Connector	mSATA, 52P/Mini PCIe
Flash Type	SLC/MLC
Form Factor	MO300A/MO300B
Data Transfer Rate	SLC: Read: 300 MB/sec (max.) Write: 130 MB/sec (max.) MLC: Read: 300 MB/sec (max.) Write: 70 MB/sec (max.)
Environmental Specification	
Operating Temperature	Standard Grade : 0°C ~ +70°C (32°F ~ 158°F) Industrial Grade : -40°C ~ +85°C (-40 °F ~ 185°F)
Storage Temperature	-55°C ~ 95°C (-67°F ~ 203°F)
Humidity	10% ~ 95%, non-condensing
Vibration	20G (7~2000Hz)
Shock	1500G/0.5ms
System Reliability	
ECC Technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
Flash Endurance	SLC: 100,000 P/E Cycles MLC: 3,000 P/E Cycles
Wear-leveling	Support
Power Requirement	
DC Input Voltage	+3.3V/+5V single power supply operation
Idle Mode	SLC: 100mA (max.) MLC: 100mA (max.)
Physical Specification	
Dimensions	29.8 x 26.8 x 4.4 mm (W x L x H)

## Features

- SATA III (6.0Gb/s) interface
- Capacity: SLC 1 GB to 32 GB  
MLC 4 GB to 64 GB
- iSMART disk health monitoring
- Intelligent error recovery system
- Write protection security
- Anti-vibration mechanical design
- Excellent data transfer speed
- Zero mechanical interference
- JEDEC standard MO300B dimension

## Ordering Information

SLC			
Models (Standard temp. SLC)	Models (Industrial temp. SLC)	Interface	Capacity
FSA001G301SC1T	FSA001G301SW1T	SATAIII 6.0G	1 GB
FSA002G301SC1T	FSA002G301SW1T	SATAIII 6.0G	2 GB
FSA004G301SC1T	FSA004G301SW1T	SATAIII 6.0G	4 GB
FSA008G301SC1T	FSA008G301SW1T	SATAIII 6.0G	8 GB
FSA016G301SC1T	FSA016G301SW1T	SATAIII 6.0G	16 GB
FSA032G301SC1T	FSA032G301SW1T	SATAIII 6.0G	32 GB

MLC			
Models (Standard temp. MLC)	Models (Industrial temp. MLC)	Interface	Capacity
FSA004G301MC1T	FSA004G301MW1T	SATAIII 6.0G	4 GB
FSA008G301MC1T	FSA008G301MW1T	SATAIII 6.0G	8 GB
FSA016G301MC1T	FSA016G301MW1T	SATAIII 6.0G	16 GB
FSA032G301MC1T	FSA032G301MW1T	SATAIII 6.0G	32 GB
FSA064G301MC1T	FSA064G301MW1T	SATAIII 6.0G	64 GB

# FSC Series

Flash SATA CFast™ SLC ,MLC



## Introduction

Axiomtek's FSC (Flash SATA CFast) series operates at SATAIII 6.0Gb/s. Compliant with CFast™ 2.0 standard, it is designed with 7+17 pin connector and is SATA compatible. Due to the idle power saving, it reduces 30% power consumption. The FSC is featured as small form factor, and suitable for most industrial application.

The FSC can work under harsh environment, and complies with ATA protocol. Without additional drives, the disk can be configured as a boot device or data storage device. The FSC support hardware write protect to prevent modification of valuable data on a device.

## System

### General Specification

Capacity	SLC: 2 GB ~ 64 GB MLC: 4 GB ~ 128 GB
Interface	SATA III 6.0Gb/s
Connector	CFast™ 2.0 standard / 7+17pin SATA
Date Transfer Rate	SLC: Read: 470 MB/sec (max.) Write: 250 MB/sec (max.) MLC Read: 310 MB/sec (max.) Write: 150 MB/sec (max.)

### Environmental Specification

Operating Temperature	Standard Grade : 0°C ~ +70°C (32°F ~ 158°F) Industrial Grade : -40°C ~ +85°C (-40 °F ~ 185°F)
Storage Temperature	-55°C ~ +95°C (-67°F ~ 203°F)
Humidity	10%~95% non-condensing
Vibration	7 Hz to 2K Hz, 20G, 3 axes
Shock	Duration: 0.5ms, 1500G, 3 axes

### System Reliability

ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
Flash Endurance	SLC: 100,000 P/E Cycles MLC: 3,000 P/E Cycles
Wear-leveling	Support

### Power Requirement

DC Input Voltage	+3.3V DC + 5%
Power Consumption	Read: 240mA (max.) Write: 320mA (max.) Idle: 110 (max.)

### Physical Specification

Enclosure Material	PC card plastic frame with metal cover
Dimensions (W x L x H)	42.8 x 36.4 x 3.6 mm

## Features

- Compliant with CFast™ 2.0 Standard  
Capacity SLC: 2 GB ~ 64 GB  
MLC: 4 GB ~ 128 GB
- SATAIII interface
- Suitable for high demanding applications
- Well performed under harsh operating environment and industrial temperatures
- Anti-vibration & shock resistance
- Support static wear leveling algorithm
- S.M.A.R.T. & i-S.M.A.R.T. Supported
- Intelligent system for error recovery
- Excellent data transfer speed
- Extremely low power consumption
- High operating reliability & durability
- Hardware write protect
- Enhanced power cycling management

## Ordering Information

### SLC

Models (Standard temp. SLC)	Models (Industrial temp. SLC)	Form Factor	Capacity
FSC002GSC1T	FSC002GSW1T	7+17pin SATA	2 GB
FSC004GSC1T	FSC004GSW1T	7+17pin SATA	4 GB
FSC008GSC1T	FSC008GSW1T	7+17pin SATA	8 GB
FSC016GSC1T	FSC016GSW1T	7+17pin SATA	16 GB
FSC032GSC1T	FSC032GSW1T	7+17pin SATA	32 GB
FSC064GSC1T	FSC064GSW1T	7+17pin SATA	64 GB

### MLC

Models (Standard temp. MLC)	Models (Industrial temp. MLC)	Form Factor	Capacity
FSC004GMC1T	FSC004GMW1T	7+17pin SATA	4 GB
FSC008GMC1T	FSC008GMW1T	7+17pin SATA	8 GB
FSC016GMC1T	FSC016GMW1T	7+17pin SATA	16 GB
FSC032GMC1T	FSC032GMW1T	7+17pin SATA	32 GB
FSC064GMC1T	FSC064GMW1T	7+17pin SATA	64 GB
FSC128GMC1T	FSC128GMW1T	7+17pin SATA	128 GB



# FSD Series

Flash SATA DOM



▲ Standard/Vertical type



▲ Low-profile /Vertical type

## System

General Specification	
Capacity	128 MB-32 GB
Interface	Serial ATA Standard II (3Gb/s) Serial ATA Standard III (6Gb/s) for 32GB
Flash type	SLC
Connector	7-pin
Form Factor	Vertical/Standard and Vertical/Low-Profile
Sustained Speed Rate (Max)	128 MB ~16 GB : Read: 68 MB/sec.; Write: 62 MB/sec. 32 GB: Read: 300 MB/sec.; Write: 130 MB/sec.
Environmental Specification	
Operating Temperature	0°C ~ 70°C (0°F ~158°F) (standard temp.) -40°C ~ 85°C (-40 °F ~185°F) (industrial temp.)
Storage Temperature	-55°C ~ 95°C (-67°F ~203°F)
Humidity	10% ~ 95% non-condensing
Vibration	5G (7 ~ 2000Hz)
Shock	50G/ 10ms
System Reliability	
ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
R/W Endurance	2,000,000 times
Wear-leveling	Support
Power Requirement	
DC Input Voltage	5V single power supply operation
Power Mode	Auto stand-by and sleep mode
Power Consumption	128 MB ~16 GB Read: 235 mA, Write: 254 mA, Idle: 100 mA only for 32 GB Read: 120 mA, Write: 130 mA, Idle: 100 mA
Physical Specification	
Enclosure Material	PC Mechanical Cover and UL-94
Dimensions (W x L x H)	Standard: 20.9 mm x 39.5 mm x 7.9 mm Low profile: 32.9 mm x 29.5 mm x 8.0 mm

Архангельск (8182)63-90-72  
Астана +7(7172)727-132  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Казань (843)206-01-48

Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41

## Features

- Serial ATA II standard interface; Serial ATA Standard III for 32 GB
- Capacity: 128 MB to 32 GB
- Suitable for high demanding applications
- Well performed under harsh operating environment and industrial temperatures
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- Perfect replacement of hard drive, compatible with Serial ATA
- High operating reliability & durability
- Low power consumption
- Fully compatible with devices and OS
- Intelligent system for error recovery
- Excellent data transfer speed

## Ordering Information

Models (standard temp.)	Models (industrial temp.)	Form Factor	Capacity
FSD128SSVCT	FSD128SSVWT	Standard/SATA	128MB
FSD256SSVCT	FSD256SSVWT	Standard/SATA	256MB
FSD512SSVCT	FSD512SSVWT	Standard/SATA	512MB
FSD01GSSVCT	FSD01GSSVWT	Standard/SATA	1GB
FSD02GSSVCT	FSD02GSSVWT	Standard/SATA	2GB
FSD04GSSVCT	FSD04GSSVWT	Standard/SATA	4GB
FSD08GSSVCT	FSD08GSSVWT	Standard/SATA	8GB
FSD16GSSVCT	FSD16GSSVWT	Standard/SATA	16GB
FSD32GSSVCT	FSD32GSSVWT	Standard/SATA	32GB
FSD128SLVCT	FSD128SLVWT	Low-Profile/SATA	128MB
FSD256SLVCT	FSD256SLVWT	Low-Profile/SATA	256MB
FSD512SLVCT	FSD512SLVWT	Low-Profile/SATA	512MB
FSD01GSLVCT	FSD01GSLVWT	Low-Profile/SATA	1GB
FSD02GSLVCT	FSD02GSLVWT	Low-Profile/SATA	2GB
FSD04GSLVCT	FSD04GSLVWT	Low-Profile/SATA	4GB
FSD08GSLVCT	FSD08GSLVWT	Low-Profile/SATA	8GB
FSD16GSLVCT	FSD16GSLVWT	Low-Profile/SATA	16GB
FSD32GSLVCT	FSD32GSLVWT	Low-Profile/SATA	32GB

Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78

Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93